

STATE OF HAWAII  
Department of Land and Natural Resources  
Engineering Division

June 27, 2008

Board of Land and Natural Resources  
State of Hawaii  
Honolulu, Hawaii

**Approval to Enter Memorandum of Agreement  
With Department of Defense Civil Defense Division  
for Kilauea River/Wailapa Stream Debris and Sediment Removal Project, Kauai and  
Makaua Stream Restoration and Debris Removal Project, Oahu**

The Engineering Division (DLNR) desires to enter into a Memorandum of Agreement with the Department of Defense Civil Defense Division (SCD) to set forth responsibilities of each party in the implementation and execution of the subject projects.

**BACKGROUND:**

The storms of February 20 through April 2, 2006 caused widespread flooding, landslides, mudslides, a dam failure, and damage to roads, streams and property.

On Kauai, the Ka Loko Dam in Kilauea failed, releasing a wave of water which inundated and damaged downstream Morita Reservoir, leaving a trail of woody debris, white goods, vehicles, and miscellaneous hazardous materials along Wailapa Stream and Kilauea River. The high and fast water surges from Ka Loko Dam uprooted or broke several thousand cubic yards of woody debris, clogging the Wailapa Stream and Kilauea River beds and depositing a significant amount of sediment in Kilauea River. The debris and sediment resulting from the failure of Ka Loko Dam pose a risk to public health and safety.

On Oahu, the heavy rainfall washed large boulders and woody debris down Makaua Stream in Kaaawa, causing streambank erosion and reducing capacity in the stream and beneath Kamehameha Highway. These conditions currently pose a threat to life and property by putting homes at risk of falling into the stream during the next flood event and the stream corridor is severely impaired and subject to accelerated erosion.

DLNR has entered a Cooperative Agreement with the Federal Natural Resources Conservation Service (NRCS), to receive funds totaling \$5,000,000.00 from the Emergency Watershed Protection (EWP) Program to implement projects for restoration efforts at Kilauea River/Wailapa Stream, Kauai and Makaua Stream, Oahu. Funds from the EWP Program require a minimum 3 to 1 Federal to State match.

PROPOSED AGREEMENT:

SCD agrees to provide \$1,000,000 to DLNR toward the State match for restoration efforts for both projects. SCD funds have been authorized by Act 118, Session Laws of Hawaii (SLH) 2006, as amended by Act 89, SLH 2007, as amended by Act 94, SLH 2008.

DLNR shall make the determination of funding allocation between the projects, which may be based on execution/timing of the projects, the final scope of work of each project, cost estimates, and/or actual construction proposals.

Within 3 months of the completion of both projects, the DLNR agrees to return any unused funds to SCD and submit a written final report on the project's results which will include an accounting of the funds disbursed.

A copy of the draft agreement, which is subject to change, is attached.

RECOMMENDATION:

That the Board authorize the Chairperson to sign the Memorandum of Agreement with Department of Defense Civil Defense Division for Kilauea River/Wailapa Stream Debris and Sediment Removal Project, Kauai and Makaua Stream Restoration and Debris Removal Project, Oahu and other necessary documents pertaining to the projects, subject to Deputy Attorney General's approval as to form.

Respectfully submitted,



ERIC T. HIRANO  
Chief Engineer

Attachment

Approved for submittal:



LAURA H. THIELEN, Chairperson  
Board of Land and Natural Resources

**MEMORANDUM OF AGREEMENT  
BETWEEN  
CIVIL DEFENSE DIVISION  
DEPARTMENT OF DEFENSE  
STATE OF HAWAII  
AND  
DEPARTMENT OF LAND & NATURAL RESOURCES  
STATE OF HAWAII**

This Memorandum of Agreement (MOA) between the Civil Defense Division, Department of Defense, State of Hawaii, hereinafter referred to as SCD, and the Department of Land and Natural Resources, State of Hawaii, hereinafter referred to as DLNR, is effective upon the signature of all parties and defines the responsibilities of each party in the Kilauea River/Wailapa Stream Debris and Sediment Removal Project, Kilauea, Kauai, and the Makaua Stream Restoration and Debris Removal Project, Kaaawa, Oahu. Any additions or changes to this MOA shall be mutually agreed upon and executed in writing by the SCD and DLNR.

Whereas, a system of storms from February 20, 2006 through April 2, 2006, created saturated ground conditions, full flow river and stream conditions, and critical water depth in the reservoirs;

Whereas, numerous rainfall records were broken, causing widespread flooding, landslides, mudslides, a dam failure, and damage to roads, streams, and property;

Whereas, Kilauea, Kauai and Kaaawa, Oahu were severely affected by the abnormal volume of rainfall, which caused disturbances and modifications to the stream channels in the respective areas;

Whereas, on March 14, 2006, the Ka Loko Dam in Kilauea, Kauai, failed, releasing an estimated 420 million gallons of water which inundated and damaged downstream Morita Reservoir, leaving a trail of woody debris, white goods, vehicles, and miscellaneous hazard materials along Wailapa Stream and the Kilauea River;

Whereas, the high and fast water surges from Ka Loko Dam uprooted or broke several thousand cubic yards (cy) of trees/vegetated (woody) debris, thereby clogging the Wailapa Stream and Kilauea Stream beds and depositing a significant amount of sediment in Kilauea Stream;

Whereas, the debris and sediment resulting from the failure of Ka Loko Dam pose a risk to public health and safety;

Whereas, the unusually heavy rainfall washed large boulders and woody debris down Makaua Stream in Kaaawa, Oahu, causing streambank erosion and reducing capacity in the stream and beneath Kamehameha Highway. These conditions currently pose a threat to life and property by putting homes at risk of falling into the stream during the next flood event;

Whereas, Makaua Stream suffered bank erosion and debris deposition as a result of the severe flooding, and the stream corridor is severely impaired and subject to accelerated erosion;

Whereas Makaua Stream poses a risk to public health and safety due to the existing debris and stream bank erosion;

Whereas, funding totaling \$5,000,000.00 from the Federal Natural Resource Conservation Service (NRCS), Emergency Watershed Protection (EWP) Program is available to assist with the restoration efforts for both projects; and

Whereas, the State DLNR is the sponsoring agent with NRCS;

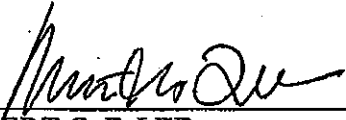
Now, therefore, the parties agree to the following:

Upon receipt of a request of an invoice/bill for collection, the SCD agrees to reimburse/advance to the Department of Land & Natural Resources an amount not to exceed \$1,000,000.00, as appropriated by Act 118, SLH 2006, as amended by Act 89, SLH 2007, as amended by Act 94, SLH 2008, to be used toward restoration efforts for the Kilauea River/Wailapa Stream Debris and Sediment Removal Project, Kilauea, Kauai, and the Makaua Stream Restoration and Debris Removal Project, Kaaawa, Oahu.

DLNR shall make the final determination in the allocation of funds between the projects, which may be based upon execution/timing of the projects, the final scope of work of each project, cost estimates, and/or actual construction proposals; and

Within 3 months of the completion of the last project, the Department of Land & Natural Resources agrees to return any unused funds to SCD and to submit a written final report on the projects' results, which will include an accounting of the funds disbursed.

In view of the above, the parties agree to the execution of the MOA between SCD and DLNR by their signatures below.

  
\_\_\_\_\_  
ROBERT G. F. LEE  
Major General, HING  
Director of Civil Defense

6/17/08  
\_\_\_\_\_  
Date

APPROVED AS TO FORM

  
\_\_\_\_\_  
Deputy Attorney General

6/16/8  
\_\_\_\_\_  
Date

Approved by the Board of Land  
And Natural Resources at its  
Meeting held on

\_\_\_\_\_

\_\_\_\_\_  
LAURA H. THIELEN  
Chairperson  
Board of Department of Land & Natural Resources  
State of Hawaii

\_\_\_\_\_  
Date

APPROVED AS TO FORM

\_\_\_\_\_  
Deputy Attorney General

\_\_\_\_\_  
Date